

**Amendment No. 1 to SB3457**

**Cohen**  
**Signature of Sponsor**

**FILED**

Date \_\_\_\_\_

Time \_\_\_\_\_

Clerk \_\_\_\_\_

Comm. Amdt. \_\_\_\_\_

**AMEND Senate Bill No. 3457**

**House Bill No. 3211\***

by adding the following language before the enacting clause:

WHEREAS, numerous examples of electronic voting equipment malfunctioning have been documented, including recently; and,

WHEREAS, without a voter-verified paper ballot of record, it is impossible for the voter to have confidence that his/ her vote is counted as intended or to have a valid source document for an audit or recount; and,

WHEREAS, several states have required a version of voter-verified paper ballot; and,

WHEREAS, federal legislation is pending to require the use of such ballots; and,

WHEREAS, such a system has been used successfully for years in Hamilton County;  
and,

WHEREAS, such a system is less costly than direct recording electronic voting machines; and,

WHEREAS, Federal Help America Vote Act funds have been allocated to Tennessee for upgrading election equipment; and,

WHEREAS, if the pending federal legislation becomes law or if Tennessee officials subsequently agree that such ballots are needed in order to increase the confidence of voters or to provide adequate source documentation for any audit or recount, significant expenditures will be needed to replace or upgrade equipment; now, therefore,

AND FURTHER AMEND by deleting Sections 2 and 3 of the bill and substituting instead the following:

SECTION 2. Tennessee Code Annotated, Section 2-1-104, is amended by adding the following as new, appropriately designated items:

(\_) "Voter-Verified Paper Ballot (VVPB)" means a permanent, individual paper ballot that is either:

(A) Prepared and verified by the voter as correctly reflecting the voter's intent, either manually or with the assistance of a ballot marking device, before the voter's vote is cast. A VVPB may be completed in the polling place or mailed to an election official from a domestic or overseas location; or

(B) A permanent paper record of the voter's vote printed by a touch screen or other direct recording electronic (DRE) voting machine that is verified by the voter as correctly reflecting the voter's intent before the voter's vote is cast; it is printed by a voting machine set up for voting at the polling place or at an early voting location designated by election officials.

Once the voter's vote is cast, the VVPB is securely stored by the voting system as the official record of the voter's vote and constitutes the official ballot of record in all cases, including all audits and or recounts;

(\_) "Ballot Marking Device" means a voting device that enables voters with disabilities including voters who are blind or visually-impaired to mark and verify as correctly reflecting the voter's intent an optical scan paper ballot. Such devices may employ similar assistive interfaces (e.g., touch screens with adjustable font sizes, audio interfaces with support for multiple languages, sip-and-puff interfaces for voters who do not have use of their hands, keypads with tactilely-distinct buttons for providing voting access to voters with disabilities).

A ballot marking device:

(A) is used only to assist voters in marking and verifying a paper ballot,

(B) will be capable of alerting a voter of overvoting,

(C) will be capable of alerting the voter if the voter has undervoted in any contest or question,

(D) will permit the voter to correct any error before the paper ballot is marked, and

(E) will enable the voter to verify that the marked paper ballot correctly reflects the voter's intent.

A ballot marking device does not maintain an electronic record of the voter's vote nor does it count votes. A paper ballot created by a ballot marking device is not considered cast until it is either deposited into a ballot box or accepted by a precinct-count optical scan vote tabulator. If the ballot marking device does not include a voter-verification capability, the scanner that tabulates the votes must provide this function in a manner considered "accessible" as defined in this section;

(\_) "Precinct-count optical scanner" means an optical ballot scanner that is located in the precinct and into which marked optical scan paper ballots either marked by hand or marked via a ballot marking device are inserted for validation and counting. Such devices will alert the voter if the voter's ballot is overvoted or undervoted, and in such cases give the voter the opportunity to retrieve the marked ballot from the scanner before it is accepted for counting in order to make corrections to the ballot. In the case of an overvoted paper ballot which is treated as a spoiled ballot, the voter can exchange the spoiled paper ballot for a new unmarked paper ballot and start over. If the paper ballot is free of undervotes and overvotes, or if the voter indicates that the ballot should be accepted with undervotes or overvotes, the scanner will accept and tabulate the ballot, then deposit it into a secure storage container for use in any subsequent audit or recount.

(\_) "Accessible voting system" means a voting system that enables all voters, including voters with disabilities, to complete all steps of the voting process in a manner that maintains the privacy of the voter's ballot, including:

(A) Marking the voter's selections on the ballot,

(B) Verifying that the voter-verified paper ballot record of the voter's vote accurately reflects the voter's intent, and

(C) Casting the voter's marked ballot.

In addition, the voting system shall enable voters with disabilities to vote without assistance to the extent possible consistent with the voter's disability. For certain disabilities, a poll worker may have to provide some type of assistance to the voter, even

in the case of voting systems that are already deemed by both the disability community and elections officials to be accessible. For example, a quadriplegic voter who requires use of an audio voting interface due to a visual or reading impairment will require the assistance of a poll worker or designated assistant in order to place headphones on the voter's head. So long as well-defined procedures are in place that enable the poll worker or designated assistant to provide to the disabled voter, without compromising the privacy of the voter's ballot, any such assistance as required by the voting system, that voting system is deemed to be accessible. There are or may be voters with disabilities or combinations of disabilities for which necessary assistance may compromise voter privacy;

(\_) "Ballot privacy container" means an opaque cover, envelope, sleeve, or cartridge that is used in conjunction with a voter's marked paper ballot to maintain the privacy of such a ballot between the time that it is marked and the time when it is cast or counted. During that interval, the privacy container will conceal the marked portion of the voter's ballot so that it is not visible;

SECTION 3. Tennessee Code Annotated, Title 2, is amended by adding the following sections as a new, appropriately designated chapter:

§2-20-101.

(a) Notwithstanding any other provision of state law to the contrary and consistent with federal law, any voting system purchased or leased with federal, state or local funds on or after the effective date of this act shall produce or use an individual voter-verified paper ballot of the voter's vote that shall be made available for inspection and verification by the voter before the voter's vote is cast. For purposes of this section, examples of such a record include a paper ballot prepared by the voter for the purpose of being read by an optical scanner, a paper ballot prepared by the voter to be mailed to an election official, whether from a domestic or overseas location, a paper ballot created through the use of a ballot marking device, or an individual paper print-out of the voter's

vote produced by a touch screen or other electronic voting machine, so long as in each case the record permits the voter to verify the record in accordance with this section.

(b) The voting system shall provide the voter with an opportunity to correct any error made by the system in the voter-verified paper ballot before the permanent voter-verified paper ballot is cast, secured and preserved in accordance with subsection (a).

(c) The voting system shall not preserve the individual voter-verifiable paper ballots in any manner that makes it possible to associate a voter with the record of the voter's vote.

(d) All existing voting equipment that cannot use or produce an individual voter verifiable paper ballot will be replaced not later than May 1, 2008.

§2-20-102.

(a) The permanent voter-verified paper ballot produced in accordance with §2-20-101 shall be preserved as follows:

(1) In the case of votes cast at the polling place on the date of the election, within the polling place in the manner or method in which all other paper ballots are preserved within such polling place;

(2) In the case of votes cast at the polling place prior to the date of the election or cast by mail, in a manner which is consistent with the manner employed by the jurisdiction for preserving such ballots in general; or

(3) In the absence of either such manner or method, in a manner which is consistent with the manner employed by the jurisdiction for preserving paper ballots in general.

(b) Each paper ballot produced in accordance with §2-20-101 shall be suitable for a manual audit or recount.

(c) In the event of any inconsistencies or irregularities between any electronic records and the individual permanent paper ballots, the voter-verified paper ballots shall be the true and correct record of the votes cast.

(d) The individual permanent paper ballots produced in accordance with §2-20-101 shall be the true and correct record of the votes cast and shall be used as the official records for purposes of any recount or audit conducted with respect to any election in which the voting system is used.

(e) The individual permanent paper ballots produced in accordance with §2-20-101 shall be securely stored at the polling location. Voters may not retain these ballots under any circumstances.

§2-20-103.

(a) The voting system, including any procedures employed by poll workers to facilitate voting by voters with disabilities, shall:

(1) Satisfy the requirements of §2-20-101 by the use of at least one accessible voting system equipped for individuals with disabilities at each polling place;

(2) Allow the voter the opportunity to complete any of the steps of the voting process in a manner that maintains the privacy of the voter's ballot, including:

(A) Marking the voter's selections on the ballot;

(B) Verifying that the voter-verified paper ballot of the voter's vote accurately reflects the voter's intent; and

(C) Casting the voter's ballot;

(b) In the case of a voting system employing paper ballots, including optical scan systems, the voter will be provided with a ballot privacy container as described in to ensure that the privacy of the voter's ballot is maintained from the time it is marked until the time that it is cast.

§2-20-104.

(a) For each election, each county election commission shall conduct mandatory hand counts of the voter-verified paper ballots in at least two percent (2%) of its precincts, comprising at least two percent (2%) of voters in the election, as follows:

(1) As soon as practical following the closing of the polls, the county election commission shall:

(A) Complete the initial vote count for each and every precinct participating in the election in that county and publicly announce the results of each such initial vote count as soon as such results are available;

(B) Publicly conduct a random drawing as specified by this section to determine which precincts will be selected for the mandatory hand counts of the voter-verified paper ballots, provided such drawing shall not occur until such time as all such initial vote counts have been completed and the results publicly announced, but no later than 48 hours after that time;

(C) Publicly announce the date, time, and location of such public random drawing at least twenty-four (24) hours before such drawing is conducted;

(D) Publicly announce the date, time, and location of such public mandatory hand counts at least twenty-four (24) hours before such hand counts are initiated;

(E) Initiate such mandatory hand counts of the voter-verified paper ballots in the precincts selected no later than forty-eight (48) hours after such selection of precincts is made; and

(F) Complete such hand counts no later than twenty-four (24) hours after such hand counts are initiated and publicly announce the results of each such mandatory precinct recount as soon as it is available.

(2) The selection of the precincts in a county in which the county election commission shall conduct hand counts of the voter-verified paper ballots as specified in this section shall be made publicly by the county election commission on an entirely random basis using a uniform distribution in which all precincts in a

county have an equal chance of being selected. The timing of when such random selection takes place is specified in §2-20-104(a)(1).

(3) If the county election commission finds that any of the hand counts conducted under this section show a discrepancy between the hand count and the initial vote count in a jurisdiction within the county, the county election commission shall conduct hand counts under this section at an additional two or more percent of precincts within the county as the county election commission considers appropriate to resolve any concerns and ensure the accuracy of the results.

(b) As soon as practicable after the completion of an audit conducted under this section, the county election commission shall announce and publish the results of the audit, and shall include in the announcement a comparison of the results of the election in the precinct as determined by the county election commission under the audit and the initial vote count in the precinct as previously announced by the county election commission.

(c) No county may certify the results of any election which is subject to an audit under this section prior to the completion of the audit and the announcement and publication of the results of the audit under subdivision (a)(1).

(d) Counties shall implement the process for mandatory random recounts no later than the first primary election for federal office in 2008.

§2-20-105.

All electronic voting systems purchased on or after the effective date of this act:

(1) Shall have been, prior to purchase, certified by a recognized authority as complying with all aspects of federal and state requirements for voting systems;

(2) Shall, with all relevant documentation, be made available by their vendors, at the request of the state election commission or the Secretary of State or any county election commission, for review by an independent expert,



selected by the requesting commission, to ensure the functionality and security of its systems. This review will include, but not be limited to reviews of:

- (A) application vulnerability;
- (B) application program functionality;
- (C) communications security;
- (D) security policy and processes;
  - (i) physical security features and vulnerabilities; and
  - (ii) system and application software security;
- (E) vendor security program management;
- (F) technology infrastructure and security controls;
- (G) security organization and governance;
- (H) suitability for county election administration security

management;

- (J) operational effectiveness applicable to a voting system; and
- (K) secure accessibility for disabled voters;

(3) All electronic voting equipment source programs, object programs and firmware, and any changes or updates thereto, shall have any necessary federal and state certifications and, regardless of any certification requirement, be thoroughly tested by the county election commissions before they are applied to any voting system and put in service in any election in the state;

(4) With respect to electronic voting systems, vendors will provide access to all information required to be placed in escrow for review by the state election commission, the state chairs of each political party, the purchasing county and/or their designees for official inspection by designated technical specialists prior to all elections.

(5) With respect to any programmable electronic voting system:

(A) All source and object code software used in the setup, test or operation of such system, except for commercial off-the-shelf software,

for which only the object code is subject to this provision, must be placed in escrow by its vendor;

(B) An authorized officer of the vendor, and manufacturer if different, must sign a binding oath certifying that all machines provided by that vendor to be used in an election in Tennessee contain object programs derived directly and only from the escrowed source software;

(C) The escrowed software may be examined by an independent expert, or experts, appointed by the Secretary of State upon reasonable, substantiated challenge supported by an order for such examination by a Tennessee court;

(D) A publishable list of the versions, release and patch levels and their dates for each software component must accompany the software to be escrowed as well as each system delivered and each software patch, update or upgrade applied to any such system; and

(E) The versions, release levels and their dates for each software component loaded on an electronic voting machine must be directly accessible and verifiable by local election officials from the setup, initialization and operating programs of each system;

(6) With respect to electronic voting systems, vendors will provide each purchasing county election commission all read-only software necessary to securely access, examine and transfer all ballot definition and ballot data files, tables and indices in a way that supports accurate and timely audits and recounts of elections;

(7) No electronic voting equipment used in an election in Tennessee shall have any capability, enabled or disabled, for wireless communication of any sort;

(8) Election officials and administrators, not vendors, must be responsible for and control the administration and use of voting equipment in any federal, state or local election in Tennessee;

(9) Any voting machine that malfunctions during early or regular voting shall not be repaired or otherwise serviced by anyone, including vendor and contractor personnel; instead it will be sealed, taken out of service and secured by the county election commission until it has been inspected by an independent expert and the commission has been advised by this expert of the best course of action to recover ballot data from the equipment.

§2-20-106.

(a) The statewide voter registration list shall meet all requirements of the HAVA Act of 2002.

(b) The state election commission will be responsible for maintaining and updating this list.

(c) At least once during each calendar year, one percent (1%) of this list will be audited to ensure accuracy.

SECTION 4. The secretary of state and the state election commission are authorized, with the various county election commissions, to implement the provisions of this act for any new purchases after the effective date of this act. In addition, they are authorized to expedite the replacement or modification of any systems that are not in compliance with this act as soon as practical. Federal "Help America Vote Act" (HAVA) funds previously allocated, or any similar funds allocated in the future are to be used to the extent available and eligible.

SECTION 5. This act shall take effect upon becoming a law, the public welfare requiring it.